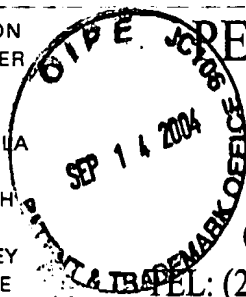


CHARLES B. GORDON
THOMAS P. SCHILLER
DAVID B. DEIOMA
JOSEPH J. CORSO
HOWARD G. SHIMOLA
JEFFREY J. SOPKO
JOHN P. MURTAUGH
JAMES M. MOORE
MICHAEL W. GARVEY
RICHARD A. SHARPE
RONALD M. KACHMARIK
PAUL A. SERBINOWSKI



PEARNE & GORDON LLP

ATTORNEYS AT LAW

1801 EAST 9th STREET

SUITE 1200

CLEVELAND, OHIO 44114-3108

TEL: (216) 579-1700 FAX: (216) 579-6073

EMAIL: ip@pearnegordon.com

STEPHEN S. WENTSLER
BRIAN G. BEMENICK
AARON A. FISHMAN
ROBERT F. BODI
SUZANNE B. GAGNON
UNA L. SCHUMACHER
STEVEN J. SOLOMON
GREGORY D. FERNENGEL
OF COUNSEL
LOWELL L. HEINKE
THADDEUS A. ZALENSKI
PATENT, TRADEMARK,
COPYRIGHT AND RELATED
INTELLECTUAL PROPERTY LAW

September 10, 2004

Mail Stop Certificate of Corrections Branch

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

Re: U.S. Patent No.: 6,779,403 B2
Issued: August 24, 2004
Inventor: Hiroyuki Baba et al.
Our Docket: 33627US1

10,619,269 Certificate
SEP 20 2004
of Correction

Sir:

A Certificate of Correction under 35 U.S.C. 254 is hereby requested to correct Patent Office printing errors in the above-identified patent. Enclosed herewith is a proposed Certificate of Correction (Form No. PTO-1050) for consideration along with appropriate documentation supporting the request for correction.

It is requested that the Certificate of Correction be completed and mailed at an early date to the undersigned attorney of record. The proposed corrections are obvious ones and do not in any way change the sense of the application.

We understand that a check is not required since the errors were on the part of the Patent and Trademark Office in printing the patent.

Very truly yours,

Michael W. Garvey, Reg. No. 35878

MWG:vlm
Enclosures

I hereby certify that this correspondence is being deposited with the United States Postal Service as first class mail in an envelope addressed to: Mail Stop Certificate of Corrections Branch, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450 on the date indicated below.

**UNITED STATES PATENT AND TRADEMARK OFFICE
CERTIFICATE OF CORRECTION**

PATENT NO. : 6,779,403 *B2*
DATED : August 24, 2004
INVENTOR(S) : Hiroyuki Baba et al.

PAGE 1 OF 1

It is certified that error appears in the above-identified patent and that said Letters Patent is hereby corrected as shown below:

Column 44, line 9, after "(mm) measured between" please delete "the".

MAILING ADDRESS OF SENDER:

Jeffrey J. Sopko
Pearne & Gordon LLP
1801 East 9th Street
Suite 1200
Cleveland, Ohio 44114-3108

PATENT NO. 6,779,403 *B2*

No. of additional copies

 0

SEP 21 2004

46 including a first electrode provided on said second surface
47 of said first piezoelectric element, and a second electrode
48 provided on said second surface of said second
49 piezoelectric element, ~~and a second electrode provided on~~
50 ~~said second surface of said second piezoelectric element,~~
51 and said oscillation plate and said first and second
52 piezoelectric elements being integrally oscillatable within
53 a range of effective oscillation frequencies; and

54 at least one terminal pin extending through said cover
55 assembly and terminating at an ~~the~~ exterior of said cover
56 assembly, said terminal pin electrically connected with
57 said first and second electrodes;

58 whereby said oscillation plate and said first and
59 second piezoelectric elements are integrally oscillatable
60 in two different modes consisting of: a first oscillation
61 mode where said oscillation plate is irregularly deformed
62 to have said peripheral portion oscillated with a single
63 vector in said oscillation direction of said oscillation
64 plate when said oscillation plate is oscillated with
65 respect to said fixed case member at a resonance frequency
66 f_0 ; and a second oscillation mode where said oscillation
67 plate is irregularly deformed to have two different half
68 parts of said peripheral portion oscillated with ~~their~~
69 respective different vectors opposite to each other in said
70 oscillation direction of said oscillation plate when said
71 oscillation plate is oscillated with respect to said fixed
72 case member at a noise frequency f_{01} , and said resonance
73 frequency f_0 and said noise frequency f_{01} are out of said
74 range of effective oscillation frequencies.

1 Claim 16 (Currently amended): An acceleration sensor
2 for detecting an acceleration as set forth in claim 15, in
3 which said supporting portion of said fixed case member has
4 a cylindrical section and a forward tapered section

5 integrally formed with said cylindrical section and in the
6 form of a truncated cone shape, said
7 forward tapered section having a top surface securely held
8 in contact with said second surface of said oscillation
9 plate and having an outer end edge in axially alignment
10 with ~~an~~ the outer peripheral end of said peripheral portion
11 of said oscillation plate, said outer end edge having a
12 diameter ϕC_1 (mm), and said oscillation plate having an
13 effective oscillation radius R_1 (mm) measured between the
14 inner and outer ends of said peripheral portion of said
15 oscillation plate;

16 whereby said oscillation plate and said first and
17 second piezoelectric element are integrally oscillatable in
18 said first and second oscillation modes with ϕC_1 (mm) / R_1
19 (mm) and f_{01} / f_0 given in the following equations.

20
$$\phi C_1 \text{ (mm)} / R_1 \text{ (mm)} \geq 0.92 \text{ and } f_{01} / f_0 \geq 0.52$$

1 **Claim 17 (Currently amended):** An acceleration sensor
2 for detecting an acceleration as set forth in any one of
3 claims 15 and 16, ~~further comprising in which said first~~
4 ~~piezoelectric element having~~ a third electrode provided on
5 said first surface of said first piezoelectric element, and
6 ~~second piezoelectric element having~~ a fourth electrode
7 provided on said first ~~second~~ surface of said second ~~first~~
8 piezoelectric element, and said fixed case member and said
9 oscillation plate are each made of an electroconductive
10 material and to ensure that said third electrode of first
11 piezoelectric element and said fourth electrode of said
12 second piezoelectric element are electrically connected
13 with said oscillation plate and said fixed case member.